

ABSTRACT OF THE DISCLOSURE

A subband processing apparatus useful for wavelet conversion and compression-decompression operations includes a plurality of memories and a plurality of analytic filter banks. The plurality of memories store an input signal in a way such that the input signal  
5 is divided into a plurality of regional signals to correspond to the plurality of memories. The plurality of analytic filter banks analyzes in parallel the regional signals. Each analytic filter bank is configured to be in a one-to-one relationship with one of the plurality of memories. In this apparatus, each of the plurality of memories stores a corresponding regional signal and at least one other signal copied from the leading and trailing portions of  
10 other stored regional signals. Reverse processing is provided to synthesize a signal from a plurality of analyzed subband signals.